Physics

Class VIII

OVERVIEW OF SYLLABUS AND SKILLS

S. No.	Chapter Name	Experiments and Activities	Skills	Values	Cross-curricular Links
1.	**Force and Pressure** • Force – A push or Pull • Exploring Force • Effects of Force • Types of Forces • Pressure • Pressure Exerted by Liquids • Pressure Exerted by Gases • Atmospheric Pressure	**Experiments** • To verify the relationship between pressure with force and area of contact • To show that liquid pressure increases with depth • To verify the effect of atmospheric pressure **Activity:** • Push or pull • Independent Reading: Characteristics of Force, Forces are due to an Interaction **Activity:** • Play Dough • Group presentation on types of forces • On static electricity by rubbing a comb and attracting paper pieces • Discussion on: Properties of liquid pressure **Activity (Pair work):** • Writing key words and sharing with other pair	• Recalling • Describing • Discussing • Creating • Interpreting • Inferring • Applying • Presenting information • Drawing conclusion	• Respect for people who pull hand-pulled rickshaws • Appreciate the development of space suits	• Maths: Calculation of Pressure • English: Vocabulary building on Types of Forces
2.	**Friction** • Force of Friction • Factors Affecting Friction • Types of Friction • Friction: A Friend or a Foe • Fluid Friction	**Experiment** • To study that friction depends on the nature of contact surface • To prove that rolling friction is less than sliding friction **Activity:** • Demonstration: Spring balance • Presentation on Types of friction • Open book assignment on advantages and disadvantages of friction • Reading Comprehension (Increasing friction, Reducing friction)	• Recalling • Describing • Discussing • Creating • Interpreting • Inferring • Applying • Presenting information • Drawing conclusion	• Appreciate the development of a variety of shoes according to the types of sports • Role of friction in our daily life	

S. No.	Chapter Name	Experiments and Activities	Skills	Values	Cross-curricular Links
3.	**Sound** • Sound is Produced by a Vibrating Body • Musical Instruments • Sound Produced by Humans • Sound Needs a Medium for Propagation • Speed of Sound • We Hear Sound Through Our Ears • Characteristics of Sound • Audible and Inaudible Sounds • Noise and Music • Noise Pollution • Hearing Impairment	**Experiments** • To prove that sound is a wave and it is produced due to vibration of objects • To prove that sound needs a medium for propagation **Activity** • Observation: Slinky to learn about vibrations • Discussion on: Different types of musical instruments, how they work, their classification • Open book assignment • Audible and Inaudible sounds **Activity:** • Reading Comprehension: Audible and Inaudible sounds • Slogan writing: Noise Pollution	• Recalling • Describing • Discussing • Creating • Interpreting • Inferring • Applying • Presenting information • Drawing conclusion	• Appreciate the role of Indian Sign language Research and Training Centre • Importance of Cochlear implant for hearing impaired	• Art and Music- Types of musical instruments • Biology- Structure of the Ear